

REMARKS

Claims 1-20 are pending, including independent claims 1, 9, 14 and 15. All claims are rejected on the basis of the same prior art as in the previous Office Action.

Claims 9 and 15 were objected to because a phrase was inadvertently repeated in the claims when they were amended in Applicant's last response. The duplicative language has been deleted.

Claims 1-13 and 15-20 were rejected under 35 U.S.C. § 103(a) as obvious over Desai and Inoue and further in view of Kishi. Applicant respectfully disagrees. Nonetheless, all independent claims have been amended to clarify Applicant's claimed invention and distinctions over the cited art.

Claim 1 is illustrative. The claimed invention is directed to providing navigation instructions to a vehicle, and in particular, providing lane change guidance to a vehicle in a partial (e.g., carpool) lane when the guidance route leads to an exit from the road itself, and advancing or leaving between the partial lane and an adjacent lane is restricted to predetermined authorization sections. The claim has been amended to clarify that when performing navigation from a vehicle position in the partial lane, across at least one other lane, and to a desired exit from the road, the timing of lane change guidance -- the selection of a particular authorized section for lane change guidance -- is based on the location of the authorized section, the position of the vehicle along the partial lane, the location of the desired road exit, and one of the width of the road and the number of lanes in the road.

This specific navigation operation is not described in or suggested by the cited references. Desai relates to a vehicle navigation system that accounts for vehicle traffic restrictions that vary with time, such as timed turn restrictions and timed lane restrictions (e.g., Abstract; col. 1, lines 5-7). Whereas some prior systems ignored lanes that were subject to time restrictions (e.g., col. 1, line 59 to col. 2, line 4), Desai considers those lanes during route planning when the lanes are available (e.g., col. 7, line 33 *et seq.*).

This operation has nothing to do with the specific navigation feature recited in claim 1 and discussed above. Moreover, the Examiner concedes that Desai does not disclose storing partial lanes and the authorized sections for advancing/leaving as link and node data, as claimed in Applicant's invention. For this point, the Examiner cites Inoue, but Inoue also does not suggest the specific navigation feature recited in claim 1.

Each of independent claims 1, 9, 14 and 15 has been amended to clarify this navigation feature. That is, during route guidance and when performing navigation from a vehicle position in a partial (e.g., carpool) lane, across at least one other lane, and to a desired exit from the road, one of the authorized sections for advancing/leaving between the partial lane and an adjacent lane is selected for lane change guidance on the basis of:

- the location of this authorized section;
- the position of the vehicle along the partial lane;
- the location of the desired road exit; and
- one of the width of the road and the number of lanes in the road.

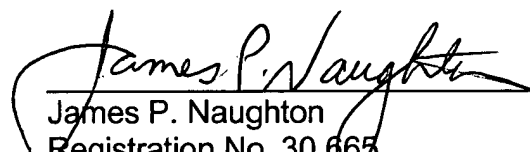
This navigation feature also is not described in or suggested by Kishi. Kishi describes a system in which the timing of guidance for a turn at an approaching intersection or branching point is dependent on the number of lanes in the road, the width of an approaching crossroad, and the speed of the vehicle. Contrary to the Examiner's assertion, Kishi does not discuss partial lanes such as a carpool lane, and does not at all address the timing of lane change guidance between a partial lane and another lane in relation to the location of a desired exit from the road itself. Note that when Kishi discusses "a lane number in the road the vehicle is currently occupying," the patent is not referring to a lane the vehicle is in but rather the total number of lanes in the road as a whole (e.g., Abstract; col. 5, lines 47-65). Both the Examiner's understanding and Applicant's previous understanding of Kishi on this latter point was incorrect.

Independent claim 14 was rejected under 35 U.S.C. § 103(a) as obvious over Desai in view of Inoue. As explained above, claim 14 has been amended and more clearly distinguishes over the cited art. Moreover, Applicant believes the Examiner is incorrect in asserting that Desai describes the claimed timing judging section of independent claim 14, which operates both during route guidance to provide guidance notification regarding an advancing/leaving point between a carpool lane and an ordinary lane on the guidance route, and also operates when route guidance is not being performed to provide notification that the vehicle is approaching an advancing/leaving point. This feature is not at all described or suggested in Desai, and Applicant requests withdrawal of this rejection for this additional reason.

The rejected dependent claims contain the subject matter of one of the independent claims discussed above and are patentable over the cited art for at least the same reasons.

In view of the amendments and remarks presented herein, Applicant respectfully requests reconsideration and expedited allowance of this application. Should the Examiner deem a telephone conference to be of assistance in advancing the application to allowance, the Examiner is invited to call the undersigned attorney James P. Naughton at (312) 321-4723.

Respectfully submitted,


James P. Naughton
Registration No. 30,665
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200